

REMARKS

This responds to the Office Action mailed on May 24, 2005. Reconsideration is respectfully requested. By this amendment, claims 1, 5, 9, 13, 18, 19 and 22 are amended, no claims are canceled, and no claims are added; as a result, claims 1 – 25 remain pending in this application.

§103 Rejection of the Claims

Claims 1-13 and 17-22 were rejected under 35 USC § 103(a) as being unpatentable over Dye et al. (U.S. 6,208,273) in view of Hawkins (U.S. 2001/0032254).

Applicants' claim 1, for example, is directed to a method for caching web page content on a wireless communication device. The method includes receiving web page content over a wireless link, identifying a data type of a portion of the web page content based on a data type tag, selecting one of a plurality of compression algorithms based on the data type, compressing the portion of the web page content using the selected compression algorithm in response to a request to cache, and decompressing a compressed portion of the web page content in response to a request to retrieve cache.

Applicants submit that neither Dye nor Hawkins disclose identifying and using a data type tag in a web page to identify the type of data and selecting a compressssion algorithm based on the data type. According to the Examiner, Dye does not expressly disclose identifying a data type within a web page. Applicants agree with this and submit that Dye further does not teach using a data type tag, as recited in Applicants' claims, as amended. Dye states that "when the data type is used to determine the compression mode, the method examines the data type of the data and determines the compression mode based on the data type of the data (see Dye column 43, lines 34 – 38). *In other words, Dye looks at the data itself to determine the data type.* This is unlike Applicants' claims which use a data type tag to identify the data type. Applicants find no mention of a data type tag which identifies the data type of a portion of web page content. Furthermore, Applicants find no teaching, suggestion or motivation in Dye to use a data type tag to select a compression algorithm.

The Examiner has cited Hawkins for disclosing the identification of a data type of a portion of web page content. The Examiner has also cited Hawkins for disclosing that data types are identified by data type tags (in the rejection as to claim 2).

Applicants submit that Hawkins discloses compressing “all text” and only text by replacing the HTML format of a web page with a Compact Markup Language (CML) (see paragraphs 168 – 176 of Hawkins). Hawkins states that CML uses variable length binary bit fields instead of text to represent options and formatting information (see paragraph 170). HTML is only text or ASCII data that represents formatting commands, but may include *references to* image data as well as other non-text data. Hawkins is only concerned with the HTML ASCII values themselves, not references to the other data. Paragraph 171 of Hawkins states that “CML compresses all text” and that the CML compression scheme compresses text in the form of a five-bit character alphabet. Paragraph 176 of Hawkins further emphasizes that CML is only a text encoding process by stating that “other forms of text encoding may be used...” Rather than compressing text that represents commands, such as colors, underlines, etc, Hawkins’ CML may choose not to send this other data rather than compress it (see paragraph 172).

The purpose of Hawkins is to reduce the data sent to a wireless client because of the limited bandwidth of the wireless link as well as the inability for the wireless client to display information on a small and limited display (see paragraphs 0014 and 172). In this way, the text compression by Hawkins’ CML may be dependent on the wireless client. There are no different compression types based on content in Hawkins. Hawkins, however, compresses the text of HTML differently depending on the specific wireless client’s display (see paragraph 173). This is clearly different than claim 1 of Applicant’s invention which selects the compression algorithm based on the data type.

This is also unlike Applicant’s claim 1 in which web page content is compressed *before* being cached on a wireless device. Applicants’ claim 1 performs compression on the wireless device itself to reduce memory usage of the wireless device. In Applicants claims, there is no compression before the data is received of the wireless link. Hawkins specifically states that “CML is merely a temporary format to replace content as it is being transferred from between a proxy server and a wireless client”. Just like HTML, Hawkins states that “CML is a stream of text and image data with embedded formatting commands” (see paragraph 174). Hawkins only

compresses the text data and either includes the image data or deletes the image data. There is no separate compression of image data, or the selection of different compression techniques for the image data. Hawkins states that “Too much bandwidth is needed to download the images” (see paragraph 11).

Discussion on Data Type Tags in Hawkins

As stated above, Hawkins had also been cited by the Examiner for disclosing data type tags. Applicant’s claims 1 and 2, for example, recite that data type tags are used to identify the data types of portions of a web page. Hawkins refers to “tags” in paragraph 169 as the tags used in HTML, which are text based, according to Hawkins. In Hawkins, it is these text-based tags themselves that Hawkins may either be compressing or deleting. ***Hawkins does not use these tags in any manner.*** Specifically, Hawkins does not use these tags to identify different data types or perform different compression algorithms. Hawkins simply views these tags as part of the text.

In view of the above, Applicants submit that neither Dye or Hawkins teaches, suggests or motivates, either separately or in combination, identifying a data type of a portion of the web page content based on data type tags, and selecting one of a plurality of compression algorithms based on the data type tag, among other things, as recited in Applicants’ claims 1 – 25. Since neither Dye nor Hawkins teaches selecting a compression algorithm for compressing a portion of web page content based on the data type identified by a data type tag, combining Dye with Hawkins can not result in Applicants’ claimed invention.

Claims 14-16 and 23-25 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Dye-Hawkins in view of Kost (U.S. 5,867,112). In view of the above discussion, combining Kost, with Dye and/or Hawkins, does not result in Applicants’ claimed invention because neither Dye, Hawkins nor Kost teaches, suggests or motivates, either separately or in combination, identifying a data type of a portion of the web page content based on data type tags, and selecting one of a plurality of compression algorithms based on the data type.

AMENDMENT UNDER 37 C.F.R. 1.116 – EXPEDITED PROCEDURE

Serial Number: 09/920,223

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Title: SYSTEM AND METHOD FOR COMPRESSING AND DECOMPRESSING BROWSER CACHE IN PORTABLE, HANDHELD AND WIRELESS COMMUNICATION DEVICES

Assignee: Intel Corporation

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney, Greg Gorrie at (480) 659-3314, or Applicant's below-named representative at (612) 349-9592 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

RUI LIN ET AL.

By their Representatives,

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Date July 18, 2005

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this day 18 of July 2005.

Name

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